

---

---

## ***The Committee on Energy and Commerce***

### **Internal Memorandum**



May 23, 2011

To: Members and Staff, Subcommittee on Communications and Technology

From: Majority Committee Staff

Subject: Hearing on “Interoperable Public Safety Communications”

The Subcommittee on Communications and Technology will hold a hearing on Wednesday, May 25, 2011, at 10:30 a.m. in 2322 Rayburn. The title of the hearing is “Creating an Interoperable Public Safety Network.” One panel of witnesses will testify:

1. Jeff Johnson, Chief Executive, Western Fire Chiefs Association
2. Joe Hanna, President, Directions (Past President of APCO)
3. Dennis Martinez, Chief Technology Officer, Harris Corp.
4. Joe Hanley, Chief Technology Officer, TDS
5. Chris Imlay, General Counsel, Amateur Relay Radio League

#### **I. Overview**

While we all share the goal of creating a nationwide interoperable public safety network, questions remain about how to achieve it. In the ten years since September 11, 2001, Congress has allocated \$13 billion and cleared 24 MHz of spectrum nationwide for public safety use, yet First Responders still do not have ubiquitous interoperable voice communications and scant few, if any, have interoperable broadband. In the last Congress, there was bipartisan agreement in the House Energy and Commerce Committee that the best approach was to auction the 10 MHz D-block for commercial purposes and encourage parties to create a public-private partnership. The FCC’s National Broadband Plan reached the same conclusion and Chairman Genachowski continues to stand by that recommendation. Many public safety officials believe, however, that the D-block should be reallocated to them for free. Regardless of where one falls in this debate, sound federal spectrum policy and targeted, responsible, long-term network investment will play a critical role in bringing interoperable communications to First Responders.

#### **II. Background**

The Committee launched and Congress passed DTV legislation in 2005 in part to meet the recommendations in the 9/11 Commission’s 2004 report. Among other things, it cleared 24 MHz of spectrum in the 700 MHz band for public safety and provided First Responders with \$1 billion for interoperable communications equipment. This brought public safety’s total holdings to approximately 100 MHz of nationwide spectrum. Of the 24 MHz spectrum from the DTV legislation, public safety is using 12 MHz for narrowband, push-to-talk voice communications. To avoid interference between narrowband and broadband use, an additional two MHz were dedicated to guard bands. That leaves 10 MHz for the broadband communications network envisioned by Congress.

The DTV legislation also cleared spectrum in the 700 MHz band to be auctioned for commercial use. The majority of that spectrum was auctioned as prescribed by law and raised approximately \$19 billion. A 10 MHz swath called the D-block, however, failed to sell. Because the FCC chose to require the winner to enter into a poorly defined public-private partnership with the Public Safety Spectrum Trust (PSST) to create a shared network, no bidder was sufficiently interested in the license. Since then, the D-block has sat awaiting re-auction.

### **III. The 700 MHz D-Block Debate**

Entities like the PSST and the Major Cities Chiefs Association are proposing that Congress pass a law to give the D-block directly to the public safety community for free. The public safety community would then use the D-block in combination with the original 24 MHz the DTV legislation cleared to create the public safety network. They argue that they must continue to use half of the original 24 MHz for narrowband voice, and that the remaining 10 MHz is insufficient to meet their future broadband needs. They also argue that they need federal funding in addition to the spectrum to pay for the construction and operation of the network.

Supporters of auctioning the D-block argue that if spectrum and money were the answer, the country would already have an interoperable public safety network in light of the close to 100 MHz and \$13 billion directed to the cause. They argue the D-block should be auctioned as currently required to meet our growing commercial broadband needs. They believe that with the right governance structure, half of the 24 MHz already cleared in the DTV legislation will be enough to meet public safety's broadband needs in the short term and that public safety can migrate the other half from narrowband voice to broadband in 5 to 10 years. Public safety would then have a 24 MHz broadband network and could use public-safety grade voice over Internet Protocol (VoIP), as well as the spectrum they have outside the 700 MHz band, for interoperable voice communications. Finally, they point out that the Congressional Budget Office (CBO) has already scored the D-block as being sold pursuant to the DTV legislation and that reallocating it now would add in the neighborhood of \$3 billion to America's deficit—at a time when neither our Committee nor the Congress has a penny to spare.

### **IV. The Cost of a Public Safety Network**

Estimates for the cost to build the network have ranged. At the Committee's April spectrum hearing, NYPD Deputy Chief Charles Dowd estimated the network would cost between \$15 and \$20 billion. The FCC's National Broadband Plan estimates that it will cost up to \$6.5 billion to build the network over 10 years plus another \$500 million to \$1 billion per year in operating costs for a ten-year total of \$12-16 billion. There are, however, proposals to offset the cost using private investment. Some have suggested that a public-private partnership between public safety entities and commercial wireless providers would decrease the cost to the government and provide spectrum benefits to both. Others have noted that emergencies are sporadic and that leasing excess capacity could offset the cost of operating the network.

In addition to the cost of public safety network, there are significant equipment costs. Public safety radios cost in the neighborhood of \$5,000 each. Some argue that is because the

public safety market is small and does not enjoy economies of scale, because the radios must be “hardened” to withstand fire and flood, and because they must be overdesigned so that they “just work” when First Responders’ lives are on the line. Others argue that it is because the market is insufficiently competitive, does not use sufficiently open technology platforms, and does not benefit from the innovation of the broader commercial market. They say that a greater reliance on public-private partnerships and the commercial market could significantly reduce costs.

## **V. Issues**

- Why do we still not have voice interoperability for public safety?
- How have the \$13 billion and 100 MHz been used? What worked, what didn’t, and why?
- How can public safety make the most of the approximately 80 MHz of spectrum it has outside the 700 MHz band?
- Is the 10 MHz that public safety plans to use for broadband out of the 24 MHz cleared by the DTV legislation enough to meet public safety’s broadband needs in the short term?
- How soon could public safety migrate from narrowband to broadband on the rest of the 24 MHz and how soon will public-safety grade VoIP service be available?
- How long will it take to build the broadband network?
- How much will construction of the broadband network cost? How much will operation and maintenance cost? How much should federal taxpayers pay? How much should state and local government and public safety be responsible for?
- Who should hold the spectrum licenses and operate the network: public safety, a not-for-profit corporation, local government, the federal government, or commercial entities?
- Should excess capacity be leased for commercial purposes? Should the revenue go into funding the network or back to the U.S. Treasury?
- Why have public safety radios lagged behind commercial devices? How can public safety reap the benefits of the commercial sector?

---

---

*If you need more information, please call Neil Fried or David Redl at 5-2927.*